

AMENDMENTS**In the Claims:**

The listing of claims below replaces all prior versions, and listings, of claims in this Application:

Listing of Claims:

Claims 1-28 (canceled).

Claim 29 (previously presented): A solid membrane comprising a mixed metal oxide material of a perovskite structure containing a lanthanide in combination with Co, Sr or an oxide thereof, provided that the solid membrane contains less than 13 mol percent bismuth, cerium, or a mixture of bismuth and cerium.

Claim 30 (previously presented): The solid membrane of claim 29 wherein the lanthanide is lanthanum.

Claim 31 (currently amended): A solid multi-component membrane comprising an intimate, gas-impervious, multi-phase mixture of a first mixed metal oxide material of a perovskite structure with a second mixed metal oxide material of a perovskite structure, wherein the first mixed metal oxide material has an electron conductivity greater than that of the second mixed metal oxide material and the second mixed metal oxide material has an oxygen ion conductivity greater than that of the first mixed metal oxide material.

Claims 32-44 (canceled).

Claim 45 (new): A solid membrane comprising a mixed metal oxide material of a perovskite structure containing a lanthanide in combination with Co, Sr or an oxide thereof, and further provided that the solid membrane contains bismuth, cerium, or a mixture of bismuth and cerium in an amount of less than 13 mol percent.

Claim 46 (new): The solid membrane of claim 45 wherein the lanthanide is lanthanum.